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Assessment Manual
1949

GOVERNMENT OF THE PROVINCE OF ALBERTA
DEPARTMENT OF MUNICIPAL AFFAIRS

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URBAN AND HAMLET ASSESSMENT

The assessment of property and business for purposes of taxation is the very foundation of local government. Given sound and equitable assessments, a reasonable amount of tax revenue may be realized without undue hardship or friction. Given a really bad assessment, both the interests of individual ratepayers and of the entire community are seriously affected.

To rightly apportion the tax burden among all the various properties and businesses liable to assessment and taxation is no easy task. The assessor must know what is, and what is not assessable; whether a given item is, for assessment purposes, "land", "buildings and improvements", or "personal property". He must be able to establish a general level of land values comparable to other similar communities, and to draw up a scale of variations that will properly relate the values of individual parcels within the unit assessed. He must be able to classify buildings according to type, materials and construction, and to allow for variations from the norm to which his standard rates apply; how to estimate depreciation both in long-lived and short-lived structures and machines. He must determine the original cost and present value not merely of machinery and equipment in general use, but sometimes of a highly specialized kind. Stock-in-trade, with its almost endless variety and changing prices, presents another and quite different demand upon his general knowledge and sources of information.

Even the most highly trained and experienced assessor cannot hope to carry such a vast miscellany of information in his head, nor can he always have ready access to a library of texts and battery of files for every conceivable contingency. What he needs, and what this manual is designed to provide, is a "ready reference" which will give him in convenient form the information commonly required, and refer him to the proper sources for obtaining special information for specific purposes.

THE ASSESSOR

The assessor is the official appointed and authorized to establish sound and equitable assessments. The Court of Revision and the Assessment Commission may review, and possibly change, individual assessments; but if the assessor is in a position to properly defend his assessments, the over-all effect of such changes will be negligible.

In order to meet the challenge of ratepayers and the demands of courts of review, the assessor must be scrupulously fair and exact in all his operations. He must be a competent valuator, equipped with all necessary information, and must have conducted himself with both dignity and discretion, keeping clear of all local controversies, and showing proper consideration for the rights and even the convenience of the persons assessed. He cannot, of course, hope to please everybody, and should not try to do so so far as his values are concerned; but he can and should avoid all unnecessary friction, bearing in mind that while he is given certain authority to inspect premises and require information, he is still a public servant whose authority is derived from the very persons over whom it is exercised. In extreme cases where it is necessary to invoke Section 23 of the Assessment Act, these provisions respecting the authority of the assessor and the duties of the ratepayer should be courteously read and explained. No legal action should be taken by any assessor without first referring the matter to the proper authority to whom he is responsible. Where for any reason the assessor cannot secure all needed information, he can only proceed on the basis of such knowledge as he has, and his valuation will be presumed to be correct until the complainant has produced proof to the contrary.

ASSESSMENTS IN TOWNS AND VILLAGES

Sections 4a and 4 b(1) of the Alberta Municipal Assessment Commission Act provide that:

> "4a -- Upon the recommendation of the Minister, the Lieutenant Governor in Council may from time to time appoint such assessors to the staff of the Director of Assessments as may be deemed necessary and may fix their remuneration and prescribe their duties."

> "4b -- (1) The Director of Assessments, upon receipt of a requisition from a town or village, may designate one or more of the assessors appointed under section 4a to make each general assessment of lands, buildings and improvements required in any such town or village."

Section 74, Subsections (1), (2) and (3) of the Town and Village Act reads as follows:

> "(1) The council shall by resolution not later than the first day of April in each year appoint an assessor."

> "(2) Whenever an assessor is appointed by the council the mayor shall forthwith advise the Minister of that appointment by mail, and in the event of the Minister disallowing any such appointment, the mayor shall immediately call a special meeting of the council for the purpose of appointing another person as assessor."
>
> "(3) The assessor appointed pursuant to subsections (1) and (2) shall be the assessor for the town or village for all purposes, including the assessment of land, buildings and improvements, excepting only such assessment as is provided for by subsection (4)."

Thus the annual assessment required by Section 19 of the Assessment Act, and the business tax assessment made under authority of Sections 20 and 21 of the same Act, will always be made by the local assessor appointed by the Council. The general assessment required by Section 18 may, if so requested, be made by a Departmental assessor; otherwise it also must be made by the local assessor.

GENERAL ASSESSMENT: Section 18 of the Assessment Act provides that in the case of a town or village the assessment must be made not later than July 1st. An assessment once properly established, may be adopted by resolution of council passed prior to March 31st for not more than four consecutive years, that is, used five years in all. Lacking such a resolution a new assessment must be made, and in any event must be made at the end of the five year period allowed. Any attempt to continue an assessment beyond this time can only result in an illegal assessment which, if challenged, cannot be enforced.

Section 18a allows until September first for the completion of personal property assessments.

ANNUAL ASSESSMENTS: Section 19 deals with the annual assessment of property not previously on the roll, or whose value has changed due to the erection or destruction of buildings and improvements, or to any physical causes other than fair wear and tear. Business tax and personal property assessments may not be adopted, but must be made each year.

Section 24 requires the assessor to make a "return" in the prescribed form, using the regular cards for buildings and improvements and for business tax assessments. No form is prescribed for personal property assessments, but all such items should be listed separately and a total established for the person assessed.

A complete list should also be made of all vacant lands, giving the proper legal description, size and assessed value.

Section 25 requires the assessor to make and attach a statutory declaration in the form prescribed. These forms may be obtained from the Director of Assessments' office.

ASSESSMENT OF LAND, BUILDINGS AND IMPROVEMENTS: The assessor should read carefully Section 2 of the Assessment Act for the proper legal interpretation of the terms employed in the Act.

EXEMPTIONS: Section 5, dealing with exemptions must be read and applied scrupulously. Except for items specifically exempted all property is liable to assessment and taxation (Section 4 of the Assessment Act). Exempt real property should be valued for purposes of record.

PIPE LINES: Pipe Lines within a town or village are not assessable under the Pipe Line Taxation Act, but by the town or village, ordinarily under Section 12 of the Assessment Act.

Section 6 provides that all assessments must be made by the municipality. Any taxing or requisitioning authority requiring information with respect to such assessments will be supplied by the town or village Secretary-Treasurer.

Section 7 (1) requires the assessment of land, buildings and improvements at fair actual (100%) value. In the case of towns and villages all assessments must first be computed on this basis and the amounts so arrived at used for the purposes of the certificate required to be furnished to any school division or requisitioning school district. (Section 289 of The School Act and Section 28 of The School Taxation Act). In the case of hamlets one-third of the value of buildings and improvements is exempted under subsection (3) both for the purposes of the municipality and the certificate furnished the school authority.

If a by-law has been passed exempting a portion of the value of buildings and improvements, such reduced value is calculated and recorded on the assessment card by the assessor. The value of the land is then added to give the total assessed value of the parcel.

Land values must be determined by the assessor, not merely repeated from the previous assessment, having in mind all the pertinent factors: location, topography, accessibility, soil, etc. Ordinarily this is done by establishing values for the best business and residential lots, and relating other values to these.

PERSONAL PROPERTY: Section 8 -- If a personal property by-law has been passed personal property must be assessed at "actual cash value" (subsection (5)). Subsection (9) permits stock-in-trade to be assessed on the basis of the "monthly average kept on hand."

ASSESSABLE IMPROVEMENTS ON EXEMPT LAND: Section 12 deals with "buildings, structures or erections" on exempt land, where these belong to someone other than the owner of the land, and makes such structures assessable to their owner, "as if the same were land", that is to say at 100% value. In towns and villages this applies to structures on streets, lanes or other municipally owned land.

MINE AND OIL WELL EQUIPMENT: Section 15 applies to the operation of mines, oil wells, etc., where the surface is occupied for mining, drilling or similar undertakings, and makes the buildings, machinery and appliances of all sorts assessable as personal property (provided a personal property by-law is inforce).

BUSINESS TAX ASSESSMENTS: Sections 20 and 21 provide for the passing of a business tax by-law prior to May 1st in any year, either on a square foot and unit of capacity basis, or a rental basis. In the former case a rate per square foot or other unit is specified in the by-law for each class of business; in the latter the annual rental value of the premises occupied must be determined and a percentage (not more than 15%) or different percentages for the various classes of business specified in the by-law.

Standard by-law forms are supplied by the Department, but the matter of establishing rates is the responsibility of the Council. The assessor's job is to establish the area, capacity or rental value, as the case may be, of the premises occupied and then apply the rates set out in the by-law.

Section 22 requires the submission of a business tax by-law for the Minister's approval before it is given third and final reading.

Section 23 authorizes the assessor to require needed information for purposes of the business tax assessment.

THE ROLL: Section 26 deals with the preparation of the roll. Particular care must be taken to enter all the required information in the roll, especially with respect to the description of land. All parcels bearing consecutive numbers should be set out in their regular order with the word "exempt" opposite those not taxable. Business tax and personal property assessments should be entered in a separate portion of the roll, forms for which are now available at the municipal printers.

Section 27 requires the mailing of assessment notices in the required form. Care must be taken to set out all necessary information on such forms.

Section 28 deals with the posting of notice of the completion of the roll.

Section 29 permits the correction of the roll, prior to October 15th, by resolution of council, and Section 30 requires the sending of an assessment notice where such correction is made.

THE COURT OF REVISION: Section 35 sets out when and how complaints to the court of revision must be lodged. Strict compliance with these provisions must be observed.

Section 37 limits the jurisdiction of the court to "complaints of which notice has been duly given". Assessments not complained against cannot be disturbed by the court of revision in any way.

Section 38 requires the secretary-treasurer to notify complainants and all affected persons of the time and place of court's sitting.

Sections 39, 40 and 41 deal with the procedure to be followed by the court.

Section 42 prohibits the court from changing any assessment "If it bear a fair and just proportion to other assessments". The assessor has a right to invoke this Section to protect the consistency of his assessment.

APPEALS TO THE ASSESSMENT COMMISSION:

Section 47 sets out who may appeal, how and when such appeals must be filed, and requires the secretary-treasurer to forward a list of all appeals to the Commission and to post this list in the municipal office, together with the time and place for hearing such appeals.

Sections 48 to 54 deal with the procedure to be followed by the Commission.

Sections 55, 56 and 57 empower the Minister to order a new assessment where this appears necessary, to prescribe rules and regulations with respect to the procedure to be followed, and to extend the time for the completion of an assessment or other matters relating thereto.

Sections 58, 59 and 60 deal with penalties for fraudulent Acts and non-compliance with statutory requirements.

ASSESSMENT FORMS

Inevitably the work of the assessor will be judged to no small extent by the legibility, accuracy and completeness of information shown on the assessment forms which constitute an official, and indeed the only detailed, record of assessments. As such they must be readily readable and understandable, with all pertinent information properly recorded and all calculations plainly shown and correctly completed. Failure in any of these essentials automatically raises the question of the assessor's competence, and casts a doubt upon the soundness of his valuations. These assessment forms, in addition to the classification sheets employed for farm lands, consist of: assessment forms (cards) for buildings and improvements, cards for business tax assessments, forms for listing and totalling "Assessment of land and improvements other than Farm Land", and for railway roadway and superstructure and station grounds. No forms have been prescribed for "personal property" and "fixtures"; nevertheless detailed lists of all such items should be prepared, with the fixtures list attached to the building card to which it relates, and the total assessed value of such fixtures added to the computed value of the building to show a total valuation for buildings and improvements.

LAND ASSESSMENTS

Farm Lands - (See "Instructions to Assessors" Pamphlet)

URBAN AND HAMLET LANDS

Here the assessor is concerned primarily with lots the relative value of which, given normal topography and soil, is a matter of location in relation to business, industrial and residential centres. Actual value, of course, is governed by effective demand, the number of people who desire and are financially able to buy land, and the profitable use they expect to make of it. Thus in determining "key-lot" (best business, industrial and residential) values, the assessor is governed by: (1) population, (2) the amount and kind of business carried on generally in each area, (3) the quality -- value -- of buildings and improvements, (4) the state of growth, and (5) utility services (light, water, sewer, etc.).

Population is the obvious and dominant factor, reflecting all other factors to a considerable degree. However, it may be that in a prosperous and rapidly growing town values have already anticipated increased population, or in the case of a town which has passed its peak and is in fact deteriorating, population may remain for a time in excess of justifying conditions; hence the reference to the other factors listed.

Analysis of assessed values in towns and villages indicates that a norm of about $1.00 of assessed value per capita of population for the best business lots and 30¢ for best residential lots may be assumed. Thus an average town of 1,000 population would have its best business lot assessed at $1,000.00 and its best residential lot at about $300.00. Industrial lots vary so widely in location and value no norm may be suggested. In each individual town or village it will be a matter relating these to business lot values on the basis of location and suitability. In an exceptionally good town this might be increased to $1.20 per capita for best business and 35¢ to 40¢ for best residential lots. Conversely, a poor town might use rates of 80¢ for best business and 25¢ for best residential lots. In all cases the assessor would be guided by a general knowledge of local conditions, using the above suggested rates as an anchor to keep his values reasonably related to the norm.

In the case of small hamlets and very small villages the spread between best business and residential lots would be somewhat less than the suggested $1.00 to 30¢ ratio, $1.00 to 40¢ or even 50¢ in some instances, or 80¢ to 30¢, or 60¢ to 30¢. In large towns where land values are high and lot sizes vary considerably, lot values should be reduced to a front-foot basis varied for "corner advantage", unusual depth, etc.

With key-lot values thus established, the assessor should then take a map of the unit to be assessed and block out the business and residential sections (perhaps more than one of each) and give a percentage rating to each parcel, beginning with the best corner lots and radiating from them in a descending scale according to location and general desirability. (See charts Nos. , ,). Acreage parcels unlikely to be subdivided partake of the nature of both farm lands and urban lots, and therefore the assessor must consider soil, topography and home-site value. That is to say each acreage parcel would have a home-site value equal to a lot similarly located, with the remaining acreage valued according to the use which could reasonably be made of it. Such value would ordinarily be considerably in excess of surrounding farm land values, but definitely less than lot values.

Sometimes actual unsubdivided farm lands occur in urban municipalities, in which case they should ordinarily be assessed on a farm land basis, plus home-site value. Unsubdivided blocks, suitably located and with sufficient demand for lots to make subdivision profitable, should be given a value somewhere between acreage and lot values. Given a scarcity of subdivided parcels, they might have an added value for probable future subdivision. Some subdivided acreage parcels are legally "farm lands" (see "farm lands" definition). In such cases the land would be assessed the same as other acreage parcels, but the buildings and improvements would be exempt.

RAILWAY RIGHT-OF-WAY AND STATION GROUNDS

Railway right-of-way and superstructure may be and ordinarily is assessed at the maximum of $1,000.00 per mile. This assessment is simply a matter of ascertaining the exact mileage (obtainable from the Railway Company) and applying the rate per mile. The right-of-way usually is confined to the continuous one hundred foot strip, except as in mountain regions where a wider strip is necessary for construction purposes. The superstructure includes ordinary passing tracks on the right-of-way.

The following are examples of items commonly encountered in the assessment of railway property, which are separately assessable on the same basis as other buildings and improvements:

> Water Tanks, Pumping Stations and Pipe Lines, Wells or Reservoirs, Coal Docks, Sand Hoppers, Round Houses, Stockyards, Turn Tables, Wyes and all extra trackage (including rails, switches, angle-bars, etc.) not included in the standard roadway and superstructure assessed on a mileage basis, Loading platforms (not to be confused with the regular station platform which is included in the superstructure.

NOTE: The C.P.R. main line is exempt under Dominion Statute.

Elevator sites and similar leaseholds on railway station grounds or right-of-way should be assessed to the lessee at rates comparable to other similar industrial sites (See rate book, Page 20), the remaining acreage in the station grounds at prevailing acreage values. Forms are provided for the railway assessment, both the right-of-way and station grounds, less leaseholds which are separately assessed and recorded on the "cards" used for buildings and improvements.

ASSESSMENT OF BUILDINGS AND IMPROVEMENTS

(See revised "booklet" plus illustrations).

BUILDINGS AND IMPROVEMENTS

Fair Actual Value - Section 7 of the Assessment Act requires that "land together with the buildings and improvements thereon shall be assessed at ...... fair actual value ......", provided that in the case of towns and villages a portion of the value of buildings and improvements may be exempted by by-law. In any case all assessments of real property must be originally made on the basis of fair actual value. This does not mean currently inflated or ruinously low sale prices, but rather the long term or average value by which a prudent and well informed investor will be guided. The rates used in the Rate Book are based on 1942 construction costs, thus avoiding the extremely low costs of the middle thirties and the extremely high costs now prevailing (1949), and establishing a level of values which may reasonably be expected to continue when the present housing demands have been reduced to something like normal requirements.

THE CUBIC FOOT METHOD

In this booklet the cubic foot method has been employed to determine replacement cost;(except grain elevators, quonset buildings and oil warehouses) that is to say, a rate per cubic foot is determined for buildings of a given type and class, similar in design, materials and construction, which rate applied to the volume or cubic contents of a building will produce a sum approximating construction cost on the basis of prices and wages for the year on which the rates are based. More elaborate methods may secure greater accuracy in the hands of experts with unlimited time for appraisals, but the cubic foot method seems best adapted to the needs of assessors, with limited time for inspection and appraisal, operating independently, but under the necessity of achieving uniform values for similar properties, in that it combines reasonable accuracy with mathematical uniformity.

The cubic contents of a building is the product of its length times its breadth times its height. Where there is a fully completed basement the height measurement should begin at the basement floor; in the case of a dugout basement at the bottom of the sill of the ground floor, with the cost of excavation added as a separate item. The height factor would then be the height from the basement floor, or ground floor sill as the case might be, to the eaves, plus the additional height necessary to allow for the roof. In the case of a gabled roof this would be one-half the height from the eaves to the peak of the roof. Other roof types require methods adapted to the particular kind of roof encountered. (See diagrams and formulae on page   of this Manual).

SCHEDULE OF CLASSIFICATIONS AND RATES

For convenience and for the sake of uniformity, buildings have been divided into a number of more or less standard types and classes commonly found in towns, villages and hamlets. Most buildings can be properly assessed simply by applying the schedule rate for the type, class and cubic capacity group to which the building belongs. Some few will require a slight modification of this rate to allow for variations from the standard set. In the case of a valuable building radically different from the standard types described in the schedule, the assessor should, where possible, secure actual construction cost figures and refer the matter to the Director of Assessments' office for construction cost figures for similar buildings.

DEPRECIATION

Depreciation, as the term is employed by appraisers, means the decrease in value due to ordinary wear and tear. The factors which enter into depreciation are age, climate, construction and maintenance. Climate, of course, is a fairly constant factor within the Province, but even so age alone does not determine depreciation. Obviously a poorly constructed and neglected building will deteriorate much faster than one which is well built and carefully maintained. Grain elevators and annexes, since they are standard type structures, more or less uniformly maintained, have fixed rates of depreciation. (See Elevator Schedule). Oil distributing sub-station warehouses should be treated as fair frame structure (see graph on page 21 of the Rate Book). Standard steel storage tanks (above ground) will ordinarily have a life expectancy of about 20 years and should be depreciated at 5% per annum until a minimum assessment of one-third of the original value is reached, which minimum should be maintained so long as the tank is in use. Other buildings vary so widely in quality of construction, the wear and tear to which they are subjected and the way in which they are maintained, that a fixed rate of depreciation is impracticable. They have therefore been loosely grouped according to materials and quality of construction, with a normal rate suggested for each group and corrections suggested for unusually good or poor construction and maintenance. (See depreciation graph on page 21 of the Rate Book).

OBSOLESCENCE

Obsolescent depreciation, or merely obsolescence as it is commonly termed, applies to cases where a building no longer effectively serves the purpose for which it was designed, and as a result a loss in revenue or other benefits, and consequently a loss in value, has been sustained.

Obsolescence may be (1) Internal, that is growing out of the function and construction of the building itself; or (2) External, that is having to do with external conditions affecting the value of the building. Thus a building originally designed for a specific purpose and having built-in features not adapted to the purpose for which it is currently used, or likely to be used, may be worth considerably less than its replacement cost less ordinary depreciation. External obsolescence may occur where there has been a permanent economic deterioration of the community, for instance in some parts of the drought area and in industrial areas where mills have been removed, or mines abandoned, etc. This also may apply to a limited area within an urban unit.

In cases where obsolescence is plainly a factor in determining value the assessor should, with proper discretion, allow for this condition. No rule or formula may be given for such allowance. It is solely a matter of the assessor's general knowledge and sound judgment.

THE ASSESSMENT FORM

The assessor should secure assessment forms similar to that shown on page of this booklet, on which should be carefully set out all information indicated in the form. Having determined the type and class and the cubic contents of a given building and entered them in the proper columns, he will then apply the rate per cubic foot which he has established for such type and class of building and so secure the approximate replacement cost, which is then placed in the "Valuation" column.

The next step is to determine the amount of depreciation and enter it in the indicated column. Obsolescence, if any, should also be placed separately in this column, with the word "obsolescence" written opposite. The reasons for obsolescence allowance should be noted on the back of the card. Depreciation, and obsolescence if any, will then be deducted from the calculated valuation and the result placed in the final column "Valuation 19___". Should there be more than one building on a given parcel of land each building should be valued and listed separately and these valuations totalled. In the case of a municipal district or an improvement district this total valuation will be subject to one-third deduction for the portion exempt under The Assessment Act, and in towns and villages by whatever portion which may by by-law be declared exempt. After such deduction, if any, has been made the value of the land will then be added to secure the total assessed value of the land together with all buildings and improvements thereon.

FIXTURES

Built-in features and fixed machinery, commonly called fixtures, are legally a part of the real property (the building) and should be so assessed, with a separate lump sum shown for "fixtures" on the assessment card and added to the computed value of the building and a detailed list of the fixtures attached to the building card. Such fixtures are commonly found in mills, factories, creameries, machine shops, grain elevators, locker plants, etc. In most such instances some distinctly movable items will be found which must be treated as personal property; but all physically affixed (even by its own weight) and permanently located machinery and equipment and necessary for the operation of the plant will be treated as fixtures and included in the assessment of the building. Where a large number of fixtures occur, a sketch-plan, as shown in illustration No. , is desirable.

GRAIN ELEVATORS AND ELEVATOR ANNEXES

Grain elevators constitute standard types of buildings for which standard assessments have been provided via the attached schedule on pages 18, 19 and 20 of the Rate Book.

The work of the assessor in such cases consists in determining the bushel capacity (as licensed by Dominion Grain Commissioners) and age of a given elevator, and then applying the rate per bushel and the rate or rates of depreciation set out in the schedule (See also graph on page 22 of the Rate Book). The only exception to this procedure is where an elevator or annex has been rebuilt to such an extent that it is essentially a different structure and has structurally a different age or value from that contemplated in the schedule.

BUSINESS TAX ASSESSMENTS

The first step preparatory to making a business tax assessment is for the assessor to read the authorizing by-law and satisfy himself that it is in order; the next, to provide himself with a copy of the schedule of classifications and rates contained in the by-law. If the assessment is on a square foot or unit of capacity basis, it is then a matter of taking the "floor space" of each individual business (largely determinable from data recorded in the real property assessment) and multiplying this by the proper rate for this type of business. The assessment will then be recorded on the assessment form, showing the location of the business premises, the owner of the business, the number of square feet, bushel or gallon capacity, the rate per unit and the total amount of the assessment.

In the case of a business tax on a rental basis, the assessor's job is to determine the "rental value" of the various business premises. For this he has no specific directions in the Act. In cities, where this basis of assessment is usually employed, the common practice has been to take actual gross rentals, except where the building is owner-occupied, or the rent paid is patently out of line with other rentals. In towns and villages, particularly in villages, renter-occupied premises are too few and rents too variable to constitute a safe guide. The assessor must therefore employ some uniform method of computing rental value, having in mind the principles set out in Section 21, Subsection (5) of the Assessment Act, namely the nature, purpose, location and profitableness of the businesses to be assessed.

This, we suggest, may be done by assuming that on the average business premises should earn as gross rent a certain percentage of assessed value -- say 10 or 12 or 15%, as conditions appear to warrant. It must be assumed that the business tax by-law will have taken cognizance of the relative profitableness of the various classes of business, with the percentage tax varied accordingly. Where, however, an individual business has a decided advantage or disadvantage in location or suitability of premises for that particular type of business and this condition has not been taken into account in the by-law, the percentage applied to assessed value to determine rental value may be varied to allow for such a situation.

PERSONAL PROPERTY ASSESSMENTS

Here, too, the assessor should first examine the authorizing by-law and satisfy himself that it is in order, and in the case of personal property other than stock-in-trade, that such personal property has been in the municipality the required sixty days prior to September 1st.

In the case of stock-in-trade the assessor may take "the monthly average ..... kept on hand" (Section 8 (9)). This method is generally considered preferable to appraisal as at the date of assessment, in that the stock at any given date may be unusually high or low. It is also generally agreed that present (1949) inflated inventory values tend to produce personal property assessments which are unduly high in comparison to the assessment of real property. In any case, whichever method is employed to determine stock-in-trade assessments, it should be followed consistently throughout the unit.

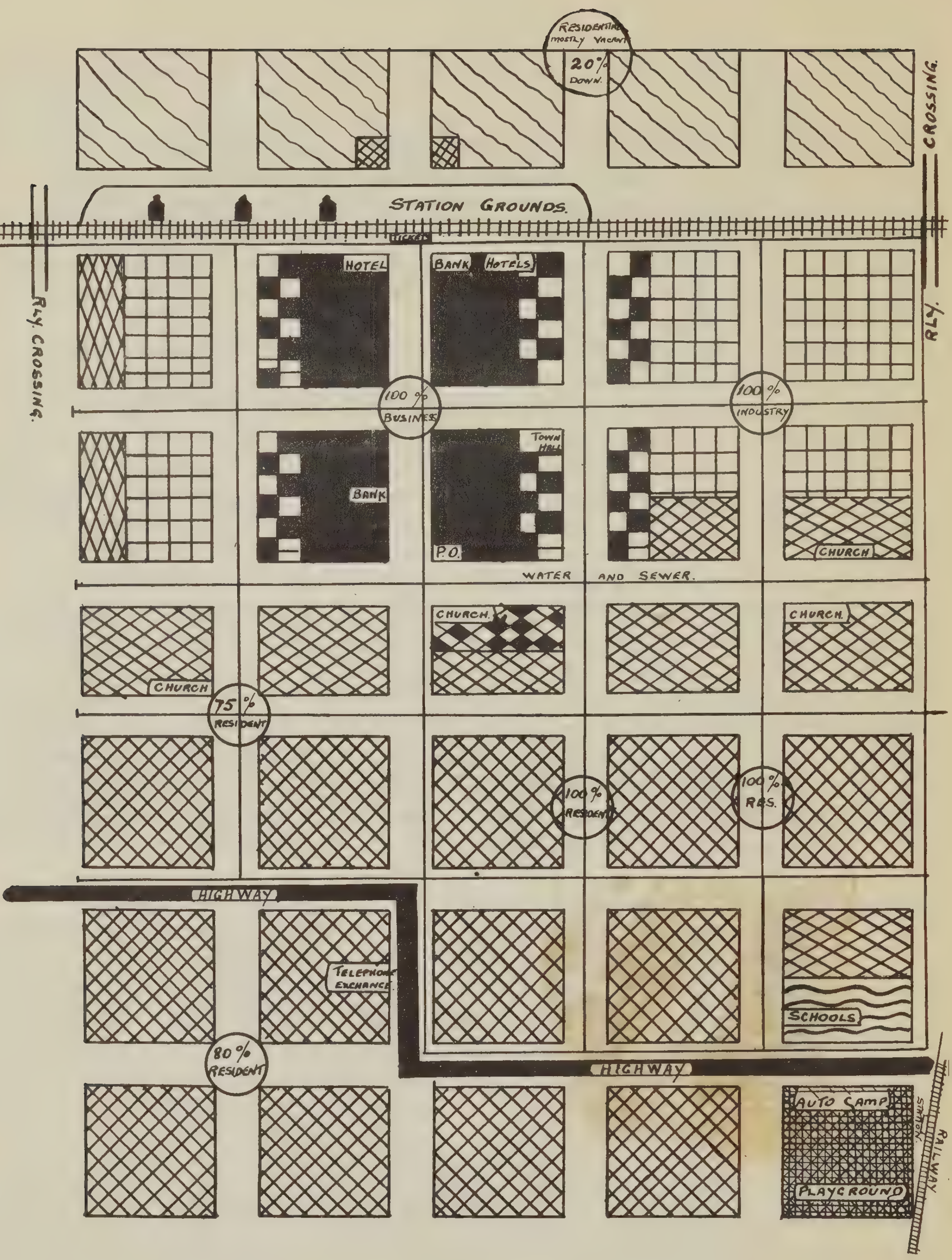
For the reasons stated above it has been suggested that in the case of stock-in-trade, as a check upon inventory values, the assessor might assume twelve as the annual rate of turnover by which he will divide the total invoices for the twelve months preceding the date of assessment, to secure a computed inventory; and that in the case of personal property other than stock-in-trade, present (1949) values should be modified sufficiently to bring them into line with other assessments.

With the above suggested method of assessing stock-in-trade, it will not, under ordinary circumstances, be necessary to consider depreciation (shelf-worn or otherwise damaged goods) since all goods assessed will have been purchased during the preceding year. In the case of other personal property, however, particularly machinery, depreciation based on "life expectancy" of the items assessed, and their actual condition at the time of assessment, is an important factor. Thus, heavy duty, slow moving machinery may have a normal twenty year life and take an average annual depreciation of 5%, while high speed machines subject to considerable stress and abrasion may have only a ten year life and therefore require about 10% depreciation. Ordinarily a minimum of 50% of the original value should be maintained so long as equipment remains in reasonably efficient use. In depreciating oil well drill rigs the assessor must be careful to give consideration to valuable items which have been replaced and are therefore much newer than the balance of the rig and to any other unusual features, good or bad, which definitely affect the value of the unit.

Machinery and equipment, subject to annual assessments over a period of years, must have a common basis of value. For example, a drill rig properly valued at $50,000.00 in 1942 and depreciated at 10% per annum, would produce an assessment of $25,000.00 minimum in 1947; whereas the same machine on the basis of 1949 prices, would cost at least $60,000.00, which depreciated at the same rate for the same period as above, would give an assessment of $30,000.00 -- a difference of $5,000.00. Since real property is now to be assessed on the 1942 level, this would appear to be the proper common denominator for personal property as well. For this purpose the following table will serve as a general guide in reducing personal property purchased in different years to a common level of value:

1942 ...	100%
1943 ...	101
1944 ...	102.8
1945 ...	108.8
1946 ...	116.2
1947 ...	131.9
1948 ...	147.5
1949 ...	149.7

To reduce to the 100% level, divide the price in any given year by the percentage index for that year.


RESIDENTIAL MOSTLY VACANT
20% DOWN.
CROSSING.
STATION GROUNDS.
TICKET
RLY. CROSSING.
RLY.
HOTEL
BANK
HOTELS
100% BUSINESS
100% INDUSTRY
TOWN HALL
BANK
P.O.
CHURCH
WATER AND SEWER.
CHURCH.
CHURCH.
CHURCH
75% RESIDENT
100% RESIDENT
100% RES.
HIGHWAY
TELEPHONE EXCHANGE
SCHOOLS
80% RESIDENT
HIGHWAY
AUTO CAMP
STATION
RAILWAY
PLAYGROUND

(Sample form for listing Personal Property).

(Letterhead of Assessing Authority)

I.D.(M.D.) ....

Sch.Div.....................

Date........................

PERSONAL PROPERTY

To.......................

....

Re: .... (Business)

.... Location - Legal Description

Sir, (or Madam),

Under authority of Section 23 of the Assessment Act, you are hereby required to furnish, WITHOUT DELAY, on this form, a detailed statement of all Personal Property in your possession and the location of such property.

All Personal Property except stock-in-trade must be itemized.

____
Assessor

__________________ of ______________
Alberta.

Article	Year Purchased	Original Cost	Present Estimated Value	Column for Assessor's Remarks
Stock-in-trade	— — —			

____
Signature of person giving information

Date ______________________

(If required this sheet may be extended)

1942 PLUMBING COSTS

	1942
Average cost for average plumbing (no gas) in a 5 room bungalow, not including connections to mains, sewers, etc	$373.00
Connections to mains & sewers, per lineal foot	1.50 per ft.
Average cost for 2 storey, 8 room house plumbing (no gas) not including connections to mains, sewers, etc	423.00
Connections to mains & sewers, per lineal foot	1.50 per ft.
Average cost of plumbing (including gas) for 5 room bungalow, not including connections to mains, sewers, etc	398.00
Connections to mains & sewers, per lineal foot	1.50 per ft.
Average cost of plumbing for 2 storey, 8 room house (including gas), not including connections to mains, sewers, etc	448.00
Connections to mains & sewers, per lineal foot	1.50 per ft.

Bath, standard 5', complete with fittings	$ 49.00
Bath, Pembroke 5', complete with fittings	80.50
Toilet bowl & tank (average) White China	36.90
Wash bowl, 18x20, complete with fittings	25.10
Kitchen sink 18x30, RR, flanged taps, simplex trap	23.40
Laundry tubs, 2 section with back, complete with traps	49.50
Hotwater tank & heater (average)	29.50
Shower bath, Niagara	41.00
Septic tank (average, field tile)	150.00

June 12th, 1948.

RELATIVE COST OF BRICK, HOLLOW CLAY TILE AND CONCRETE BLOCKS

In a brick house with full basement, concrete basement walls and brick superstructure, the walls are 25 per cent of the total cost of the building. For frame superstructure with concrete basement walls, the walls are 22 per cent of the total cost of the building. This applies to buildings with ordinary finish.

Relative costs for 8 inch wall:

BRICK	HOLLOW TILE	CONCRETE BLOCKS
1	.67	.56

Thus the cost of a whole building constructed with concrete block walls would be (other things being equal) approximately 89 per cent of a brick building, and if the walls were constructed of hollow clay tile the cost would be approximately 92 per cent of a brick building.

COAL WEIGHT IN BINS

Anthracite per cubic foot	53 lbs.
Bituminous per cubic foot	48 lbs.
Lignite per cubic foot	48 lbs.
Average cu.ft. per ton loose (2000 lbs.)	36 to 40 c.ft.

Hard Coal solid state, average 80 lbs. per cu. ft. or 25 cu. ft. per ton.

COST OF BUILDING MATERIALS IN EDMONTON

YEAR --- 1942

LUMBER:

2 x 4	$42.00	per F.B.M.
2 x 6	42.00	" "
2 x 8	42.00	" "
Shiplap or sheathing boards	43.00	" "
Spruce Flooring, 1x4	48.00	" "
Mountain Fir Flooring, 1x4	49.00	" "
E.G. Fir Flooring, 1x4	94.00	" "
Heavy Timbers	57.00	" "
Cedar Shingles	6.50	per 1,000
Spruce Drop Siding	48.00	per F.B.M.
Cedar Bevel Siding, 1x6	68.00	" "

Windows (2 sash), 24x24	3.25	
Store Sash, O.S.M. 8'x6' 3W4H, Dbl. Dia.	31.10	
Store Sash, O.S.M. 10'x6' 5W3H, Dbl. Dia.	38.46	
Common nails, 1½ to 6", per lb.	.09	
Coated nails, 1½ to 3", per lb.	.10	
Fir Door 2-8x6-8x1 3/8, 5 panel	5.25	
Stucco Wiring, per roll, 450 sq. ft.	7.00 to 10.60	
Roofing, 3 ply ruberoid per roll to cover 100 sq.ft.	3.60	
Building Paper - Plain per roll, No. 1	1.60)	
Plain per roll, No. 2	.80)	roll covers
Tar per roll, No. 1	1.85)	400 sq. ft.
Tar per roll, No. 2	1.40)	

BRICK-MAKING EQUIPMENT

There is a very wide range of brick-making machinery, depending wholly on type of brick made and methods of manufacture.

There are several types of kilns in use including the permanent "Beehive" type equipped with electric thermometers and heat-recording machines and ports for glaze, etc.; the semi-permanent kiln built of brick, in which the bricks are burned and the walls are left when the product is drawn, and the non-permanent kiln erected of raw bricks which are all burned as product (including the walls).

Some manufacturers have heated drying sheds for curing the raw bricks before burning. These are usually steam-heated and equipped with fans and (or) blowers for circulation of the heated air. Others have open drying sheds which are so constructed as to take every advantage of natural air currents. Some use gas fuel, some wood and others use coal for burning the bricks. However, it would appear that all brick-making plants would include:

1. Pug-mill - approximately $1,100.00

2. Power, which may be an electric motor of 50 H.P. or a steam engine and boiler of 60 H.P. (a larger boiler would be required if steam heat were required for drying).

3. Moulds for "sand-clay"bricks for a plant capacity of 32,000 per day would cost approximately $3,000.00.

   or

   If bricks are made of more plastic clay, a "wire-cut" machine would be required costing approximately $4,000.00.

4. "Open" drying sheds would cost approx. $700.00 each. All figures quoted are new pre-war prices. If heated drying lofts or sheds were used, the cost would depend on extent and general construction of the structure and would be appraised in same manner as any other building.

Some brick-making plants have only the very minimum requirements in the way of equipment and this applies particularly in regard to buildings.

Clinker brick is brick that has been over-burnt either by accident or design. This type of brick was formerly discarded as spoiled, but latterly has been in good demand and has commanded a good price. This type of brick is not affected by weather conditions.

Sand-lime brick is a mixture of lime, water and sand pressed in moulds and dried. This brick is not burned.

Cement brick is a mixture of cement, water and sand made in moulds and dried. This is not burned.

Some machinery would be required for the making of all these types and in a general way it would be somewhat similar to the machinery used in making kiln-brick.

(Much of the above information by courtesy of
Mr. J. Little, Edmonton, February 18, 1946.)

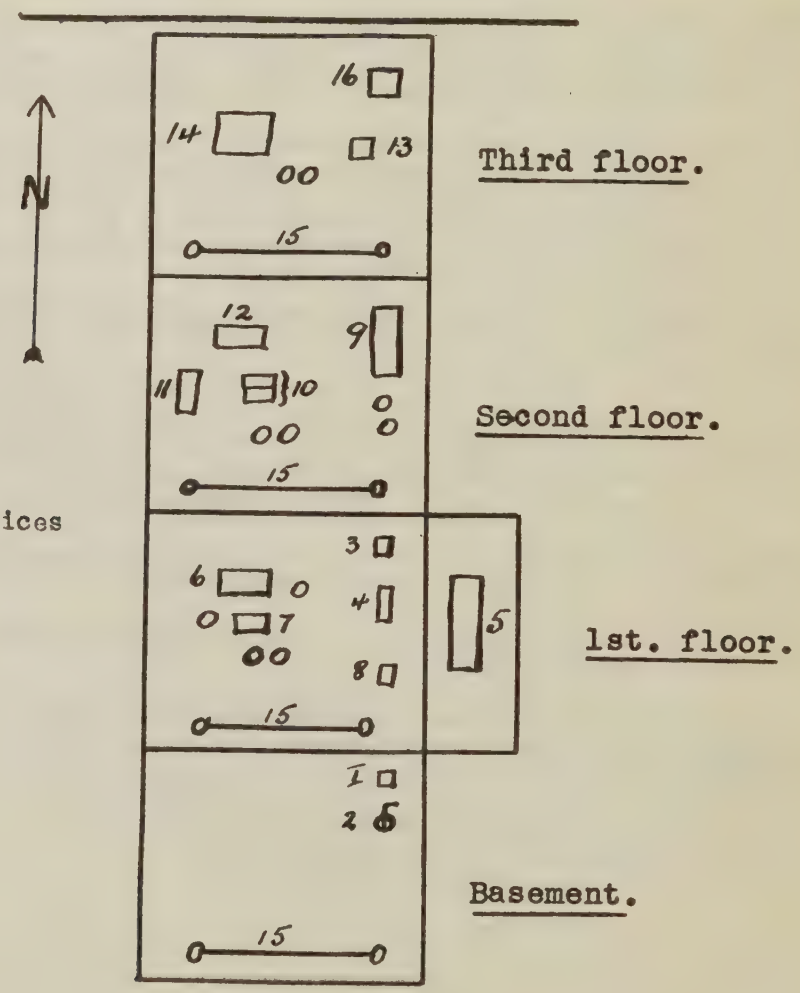
ASSESSOR'S RECORD OF EQUIPMENT (Fixtures).

Example: Flour Mill.

List......Mostly 1923 NEW.		NEW value.
No. 1	Electric Motor..40 HP.,3 Ph.,220V,800-900RPM.	$ 600.00
2	Well & Power pump	200.00
3	Fanning Mill	100.00
4	Temperer	50.00
5	Rumley Steam Boiler..175lb. Pressure	100.00
6	Scales 2500 lbs., & Scales 2000 lbs	140.00
7	Sack Packer & Hopper Sack Filler	150.00
8	Carter Disc Cleaner..50 bus.,Capacity	140.00
9	Bran Duster	250.00
10	4 Stands Rolls 18x9 (3), 24x9 (1)	2600.00
11	Golden McCullough Sifter..12 sections	800.00
12	Purifier	300.00
13	Bleacher Feeder	100.00
14	Dust Fan, Dust Hoppers & Conductors	140.00
15	Line Shafts, Belts & Pulleys	600.00
16	Cleaner	200.00
00	Elevator legs and buckets	250.00
		$6720.00
	25%.. Depreciation	1680.00
	Assessment	$5040.00

Date.........

................Assessor.



Example only, prices not necessarily relevant.

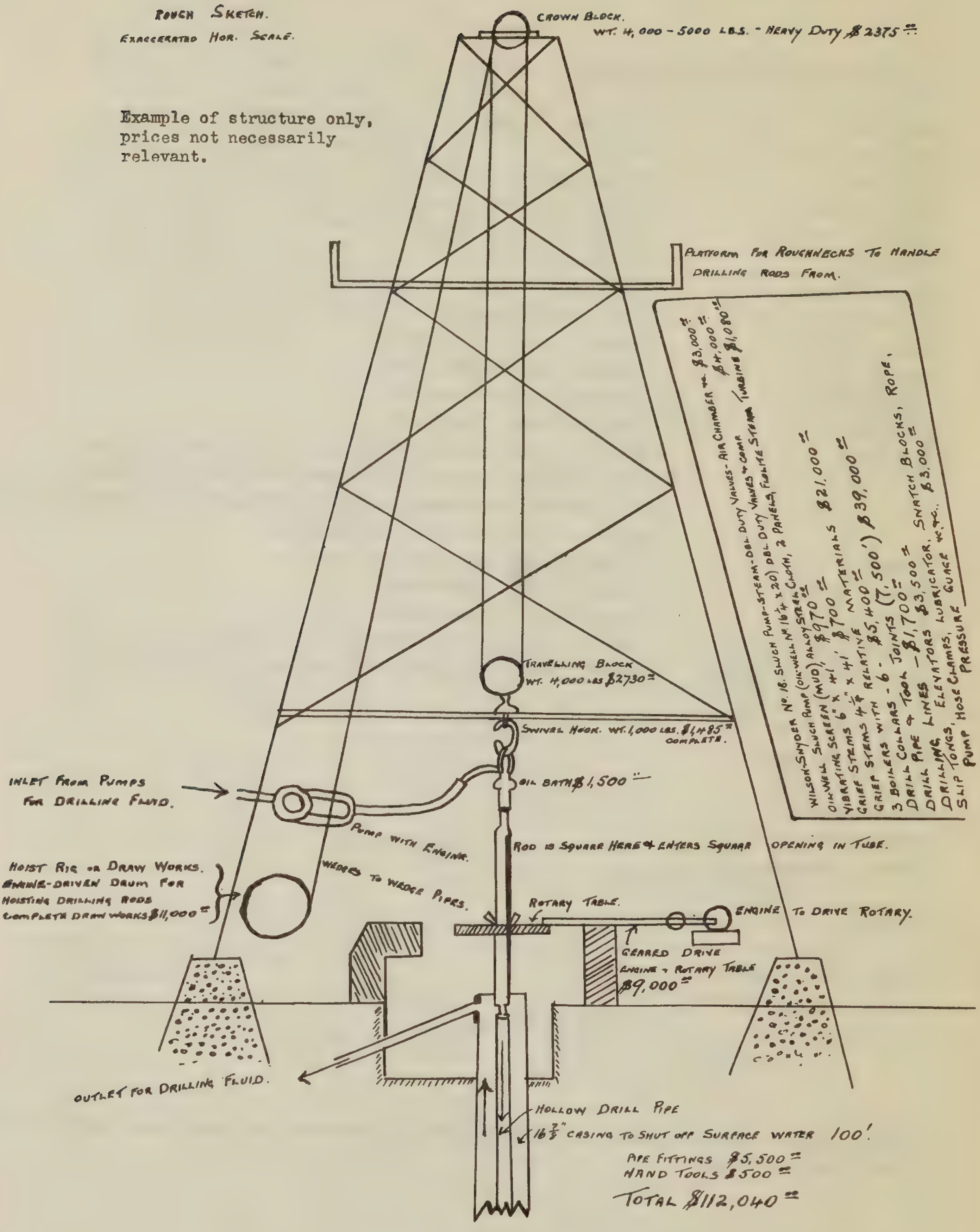
OIL WELL EQUIPMENT

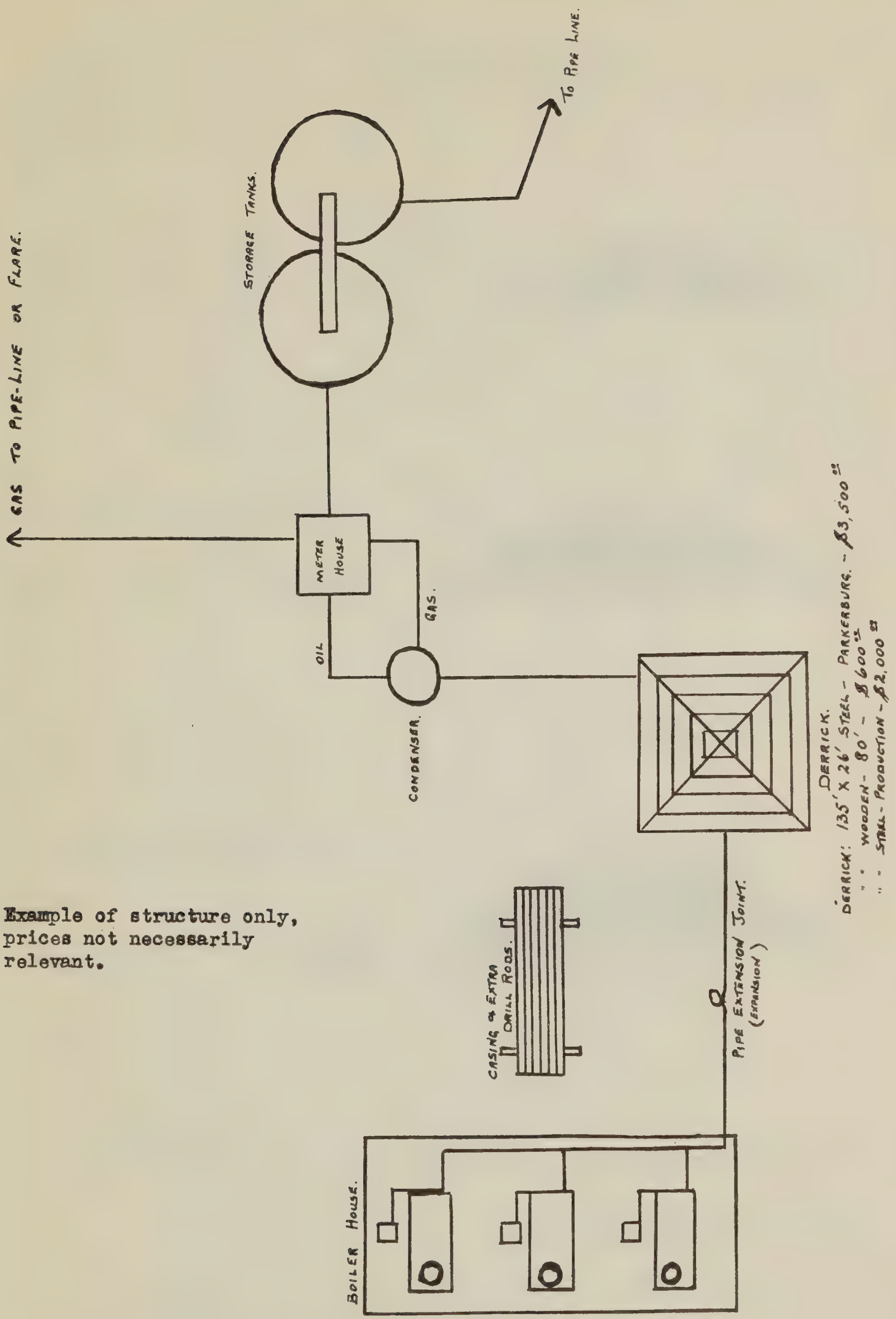
PARTICULARS TO BE OBTAINED:

Derrick - Height, base and construction.
Rotary Unit - Make.
Engines - Type, make and H.P.
Draw-works - Make and how powered.
Rotary Table - Diameter and make.
Mud hogs - Make and size.
Crown Block - Make and tons.
Travelling Block - Make and tons.
Shale Shaker - Make, size and drive.
Drill Pipe - Length and diameter.
Drill Stem - Length and diameter.
Casing - Length and diameter.
Boilers - Make, date built, length and diameter, number of tubes and diameter of same, working pressure and efficiency, automatic feed, etc. (All this will be found on Boiler Certificate).
Pumps - Size and make.
Steam Lines - Length and diameter.
Water Lines - Length and diameter.
Lighting Plant - Make, capacity, generator, wiring, etc.
Any other Engines - Make and H.P. steam or electric drive.
Foxboro Meters -
Flow Meters -
Drill Collars -
Grief Stems -
Drill Lines -
Slips and Tongs -
Rope, Clamps and Lubricators -
Snatch Blocks and Gauges -
Hand Tools and Instruments -
All Buildings - Full details.

Obtain also age of each of the above, the owner's name and address and location of rig.

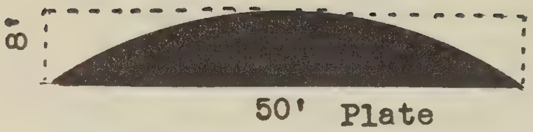
Example of structure only, prices not necessarily relevant.


ROUGH SKETCH.
EXAGGERATED HOR. SCALE.
CROWN BLOCK.
WT. 4,000 - 5000 LBS. - HEAVY DUTY $2375.00
PLATFORM FOR ROUGHNECKS TO HANDLE DRILLING RODS FROM.
WILSON-SNYDER No. 18. SLUSH PUMP-STEAM-DBL. DUTY VALVES-AIR CHAMBER &c. $3,000.00
OIL-WELL SLUSH PUMP (OIL-WELL No. 16¼ x 20) DBL. DUTY VALVES & COMP. $4,000.00
OIL-WELL SLUSH SCREEN (MUD), ALLOY STEEL CLOTH, 2 PANELS, FLOLINE STEAM TURBINE $1,080.00 $970.00
VIBRATING SCREENS 6" x 41' $700 MATERIALS $21,000.00
GRIEF STEMS 4¼" x 41' RELATIVE MATERIALS $39,000.00
GRIEF STEMS WITH - 6 - $5,400.00 (7,500') $39,000.00
3 BOILERS COLLARS - 6 - JOINTS $1,700.00
DRILL PIPE & TOOL - $1,700.00 ROPE,
DRILL PIPE LINES - $3,500.00 SNATCH BLOCKS,
DRILLING ELEVATORS, LUBRICATOR, $3,000.00
SLIP TONGS, HOSE CLAMPS, GUAGE &c.
PUMP PRESSURE
TRAVELLING BLOCK
WT. 4,000 LBS $2730.00
SWIVEL HOOK. WT. 1,000 LBS. $1485.00 COMPLETE.
INLET FROM PUMPS FOR DRILLING FLUID.
OIL BATH $1,500.00
PUMP WITH ENGINE.
ROD IS SQUARE HERE & ENTERS SQUARE OPENING IN TUBE.
HOIST RIG OR DRAW WORKS. ENGINE-DRIVEN DRUM FOR HOISTING DRILLING RODS COMPLETE DRAW WORKS $11,000.00
WEDGES TO WEDGE PIPES.
ROTARY TABLE.
ENGINE TO DRIVE ROTARY.
GEARED DRIVE ENGINE & ROTARY TABLE $9,000.00
OUTLET FOR DRILLING FLUID.
HOLLOW DRILL PIPE
16⅞" CASING TO SHUT OFF SURFACE WATER 100'.
PIPE FITTINGS $5,500.00
HAND TOOLS $500.00
TOTAL $112,040.00


GAS TO PIPE-LINE OR FLARE.
STORAGE TANKS.
TO PIPE LINE.
METER HOUSE
OIL
GAS.
CONDENSER.
DERRICK.
DERRICK: 135' X 26' STEEL - PARKERSBURG. - $3,500.00
" " WOODEN - 80' - $600.00
" " STEEL - PRODUCTION - $2,000.00
CASING & EXTRA DRILL RODS.
PIPE EXTENSION JOINT. (EXPANSION)
BOILER HOUSE.

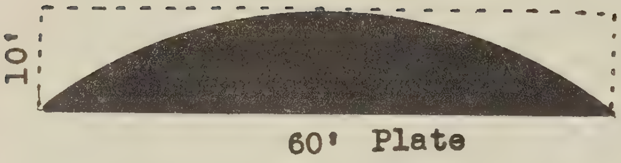
Example of structure only,
prices not necessarily
relevant.

GARAGE TYPE ROOF.



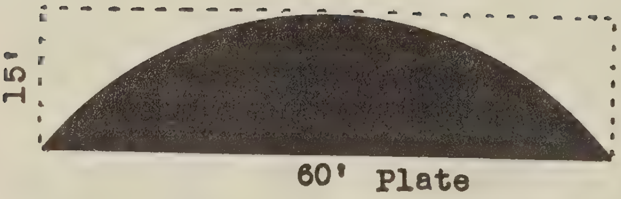
⬚ Area 400 sq.ft.

⌓ Area 296.6 sq.ft.



⬚ Area 600 sq.ft.

⌓ Area 414.43 sq.ft



⬚ Area 900 sq.ft.

⌓ Area 628.682 sq.ft.

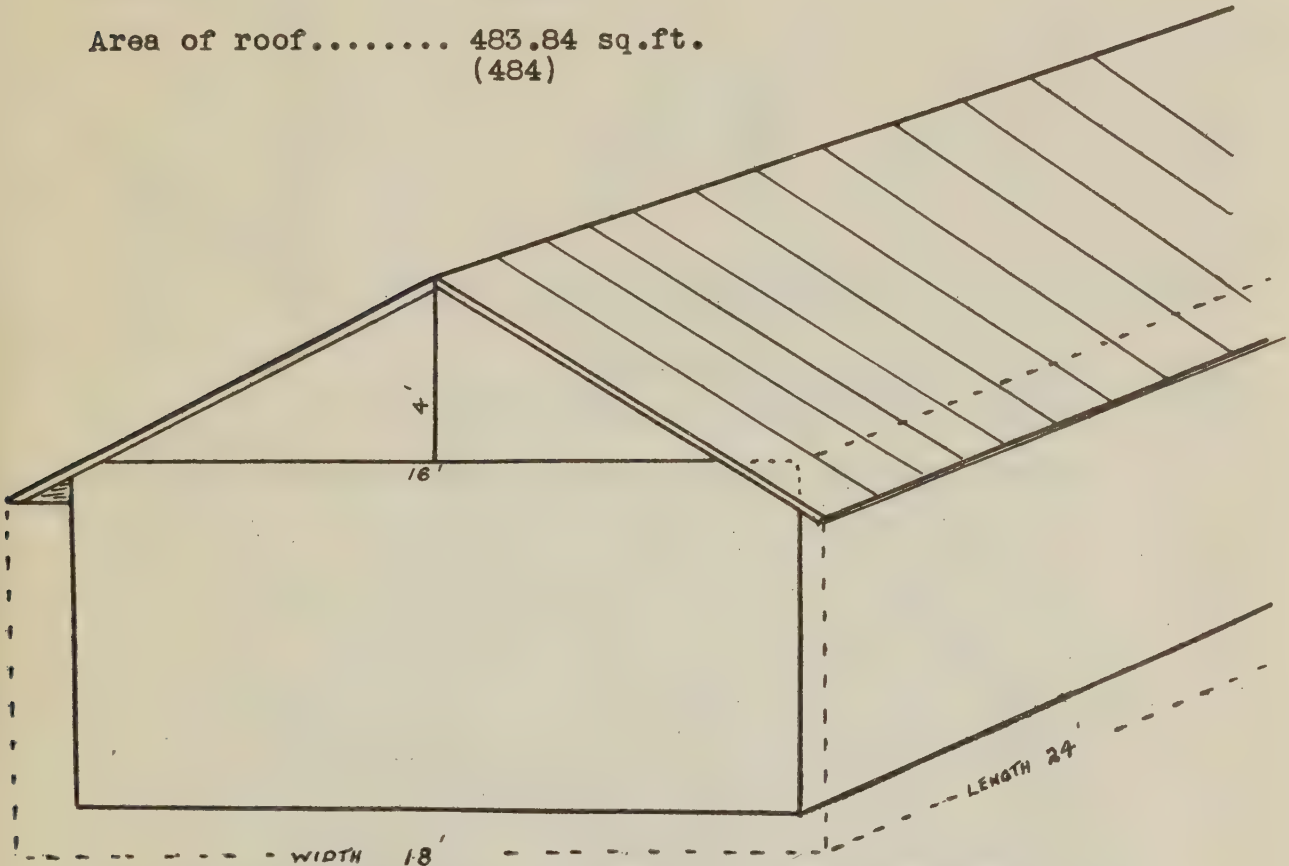
To determine the mean height of this type of roof take $\frac{7}{10}$ of height from plate to peak.

AREA OF ROOF.

Find area of building (including overhang of roof,if any);
Determine the pitch of the roof;
Multiply the area in square feet by the figure shown opposite the pitch in the table below.

EXAMPLE: 18 x 24 = 432 sq.ft.
Pitch: ¼ 1.12

Area of roof........ 483.84 sq.ft.
(484)

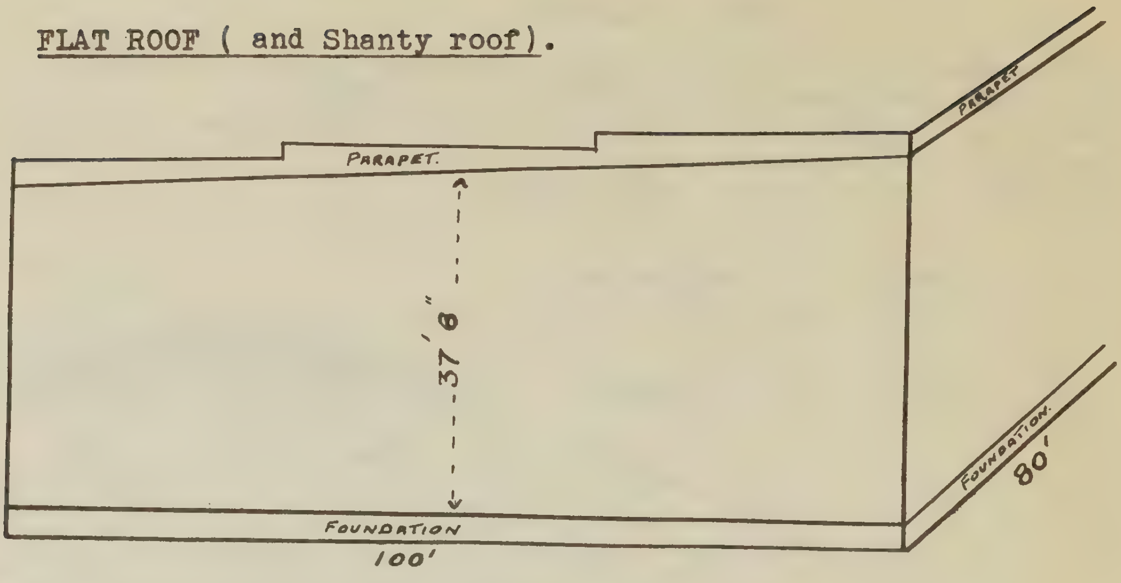


To find the AREA measure on ground to plumb with overhang all around the building.

Pitch.	Multiply by.
1/6	1.06
1/5	1.08
1/4	1.12
1/3	1.21
1/2	1.42
2/3	1.66
3/4	1.81
4/5	1.90
1 (full)	2.24
Steeper pitches	2.50

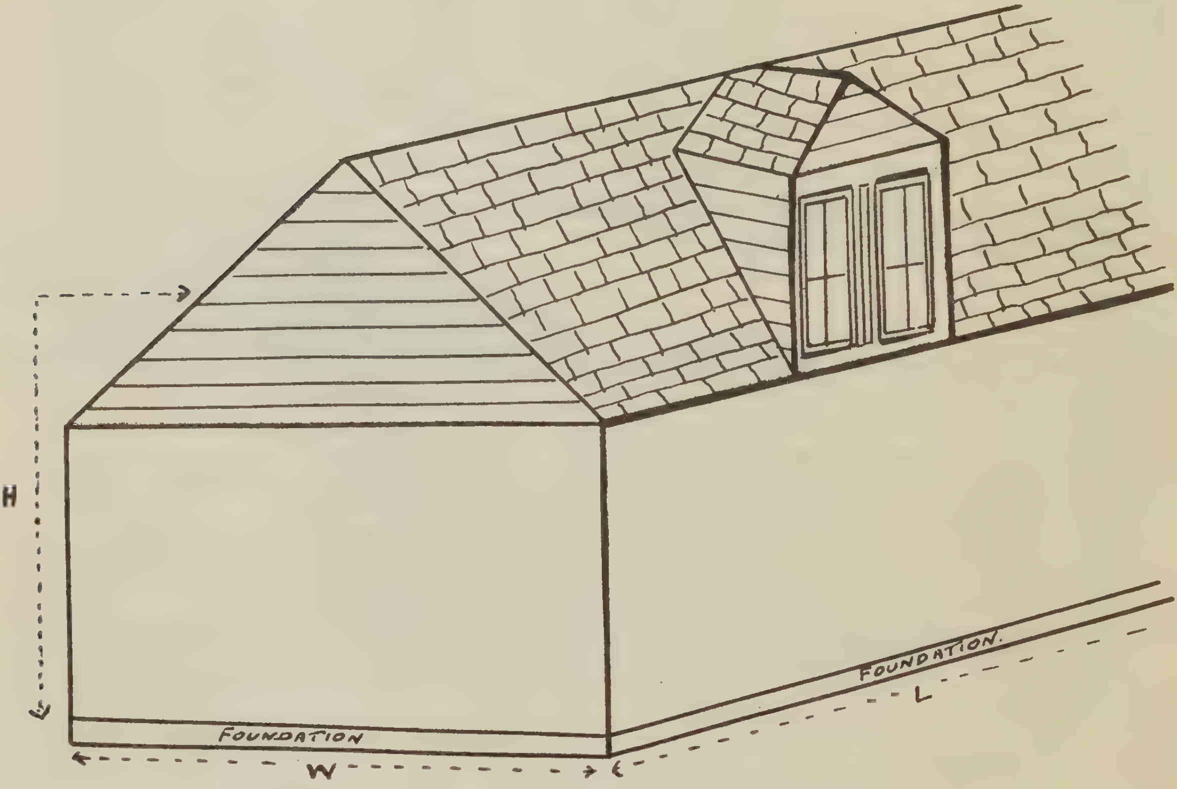
(Adapted from Sask.,Assessor's Manual).

FLAT ROOF (and Shanty roof).



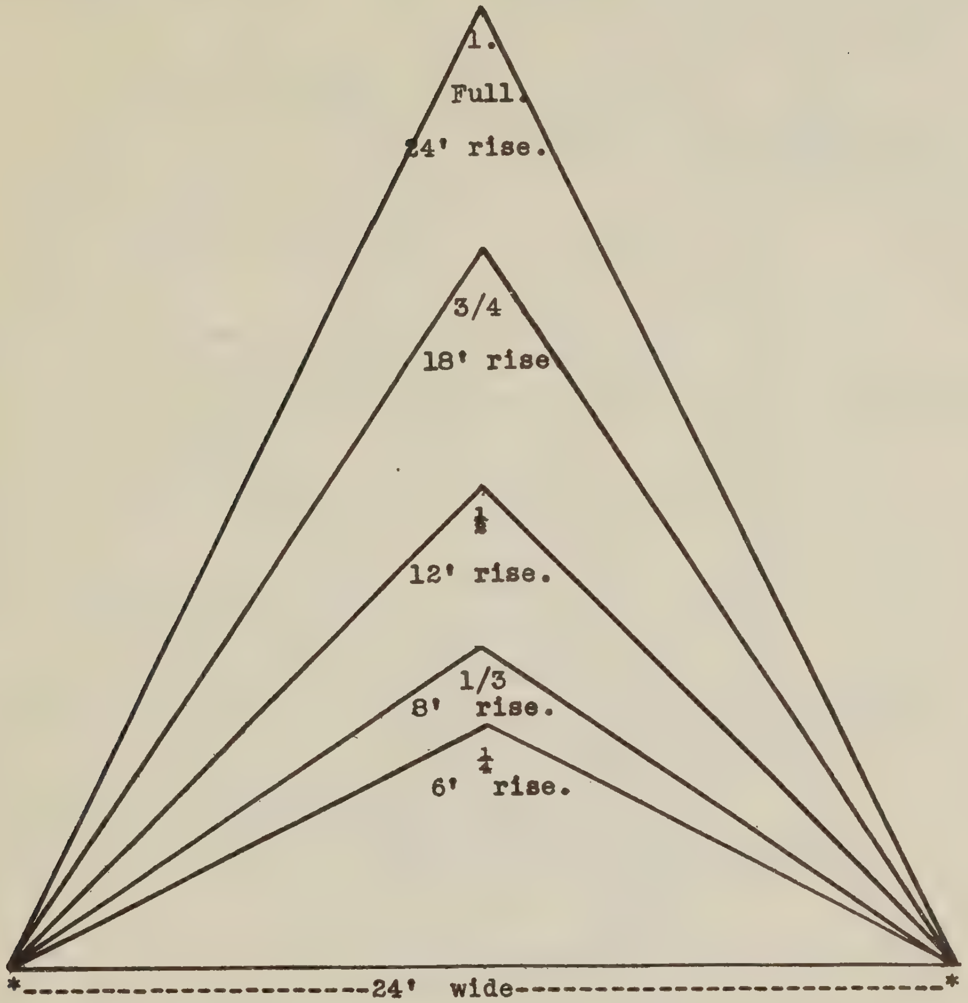
Rule: L x W x Average height.
Example : : 100x80x37½ ....300,000 Cub.ft.

If full basement measure height from basement floor.



Measure building in usual way...LxWxH., and ADD estimated value of DORMERS.

COMMON ROOF PITCHES.


1.
Full.
24' rise.
3/4
18' rise
½
12' rise.
1/3
8' rise.
¼
6' rise.
------------------------24' wide---------------------------

PITCH :: $\frac{\text{rise}}{\text{width}}$.

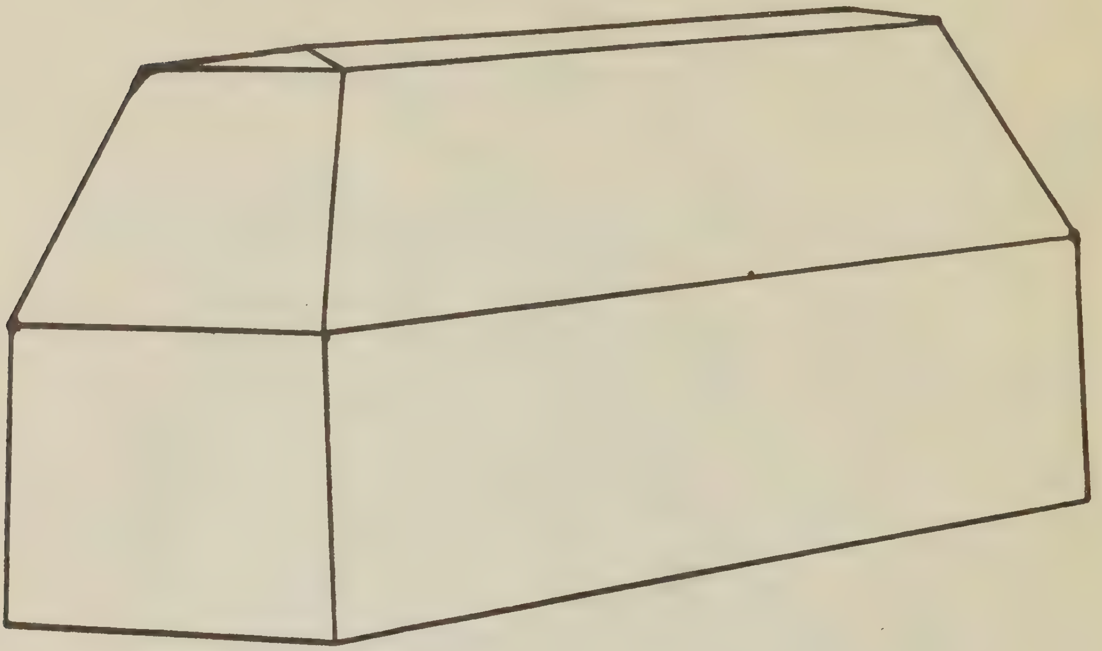
Angle with Plate line.

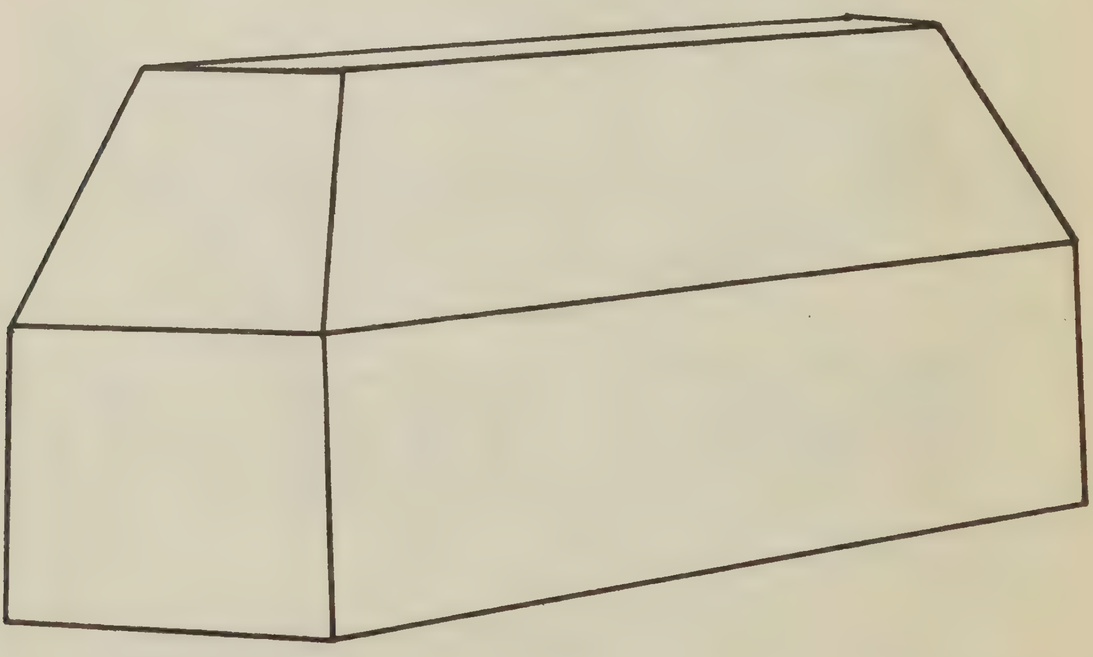
Quarter pitch	26 deg. 34 min.	Tan. .5
One-third pitch	33 deg. 41 min.	Tan. .666
Half pitch	45 deg. ----	Tan 1
Three quarter pitch	56 deg. 19 min.	Tan 1.5
Full pitch	63 deg. 26 min.	Tan 2

P.L.

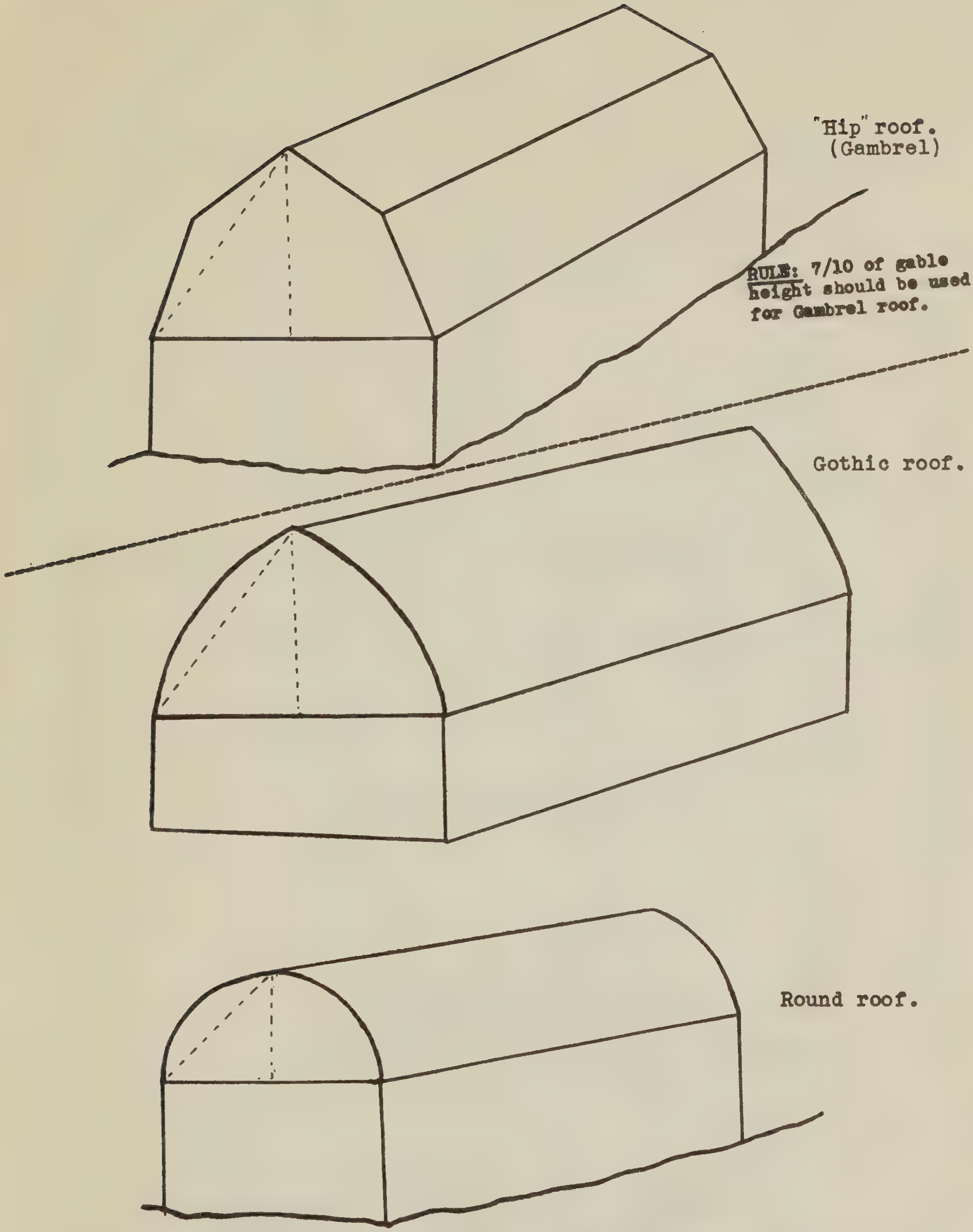
MANSARD ROOF.

The lower slope approaches the vertical and usually contains dormer windows. The upper slope is less inclined and commonly more or less flat. The storey under such a roof is commonly called a garret.





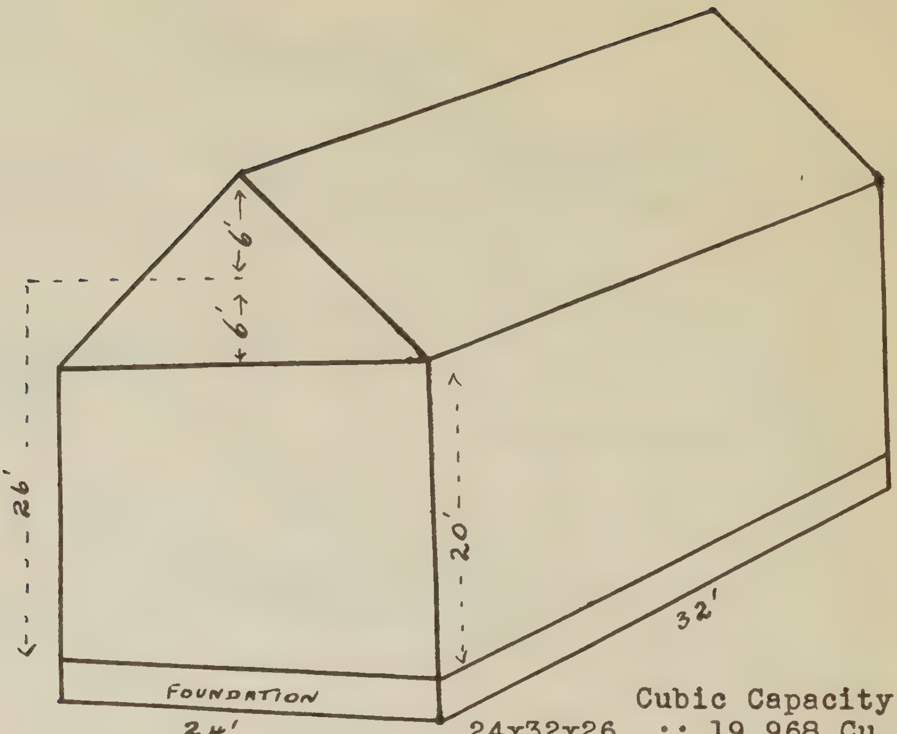
To determine height of this type of building measure from the basement floor to ceiling of Mansard (garret) inside.



RULE: 7/10 of gable height should be used for Gambrel roof.

Rule: Area of triangle x 3 1/7 ≈ area of gable; add area of end wall and multiply by length. Result : cubic feet.

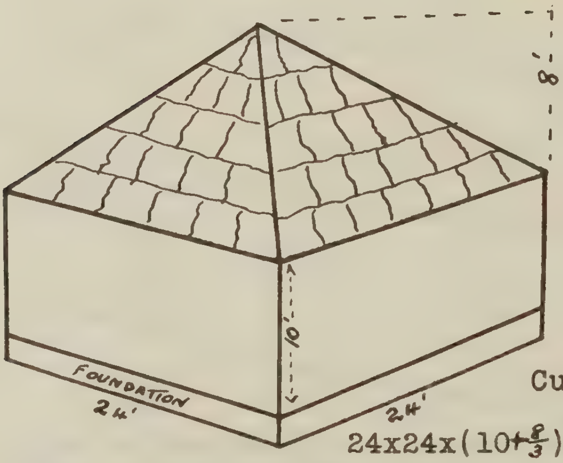
PITCH ROOF.



Cubic Capacity ::
24x32x26 :: 19,968 Cu. ft.

For buildings with full basement take measurement from floor of basement to half height of gable.

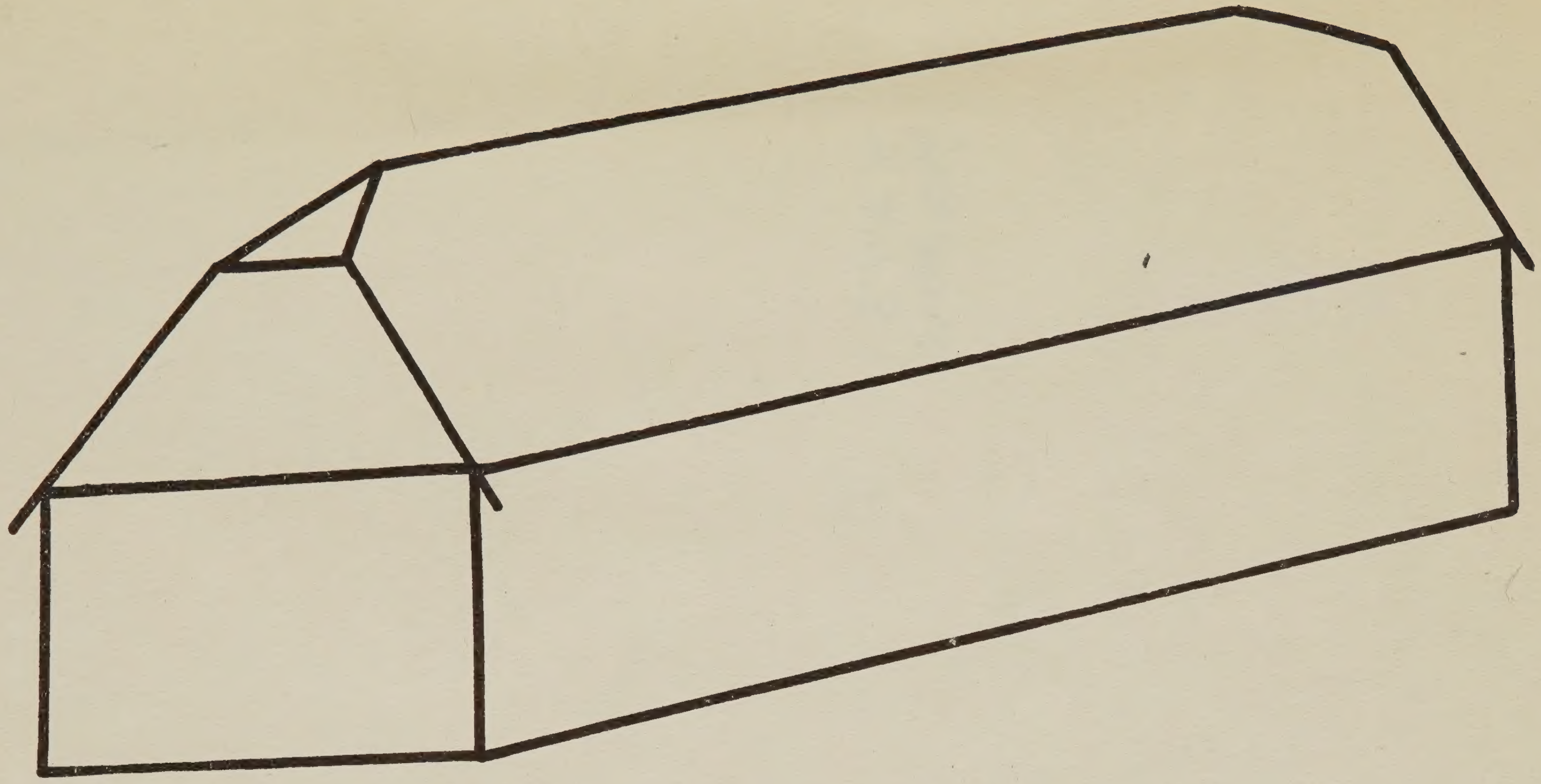
Cottage or Pyramid roof.



Cubic Capacity : :
LxWx mean height.
24x24x(10+$\frac{8}{3}$) : : 7,296 cubic feet.

ROOF.. Mean height : : $\frac{H}{3}$.

For buildings with full basement take measurement from floor of basement .



JERKINHEAD ROOF.

To determine cubic contents calculate in same manner as for an ordinary pitch roof and deduct cube of "corners-off". If upper storey is finished measure height to ceiling.

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